AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1. (Currently Amended) A thin film electrode for forming an ohmic contact in light emitting diodes or laser diodes, comprising: a first electrode layer laminated on a p-type gallium nitride layer and including a Ni--X solid solution; and a second electrode layer laminated on the first electrode and including at least one element selected from the group consisting of ~~Au, Pt,~~ Pd, Ni, Ru, Rh, Re, C, Cu and Ir.

Claim 2. (Previosuly Presented) A thin film electrode, comprising

a first electrode layer laminated on a p-type gallium nitride layer and including a Ni--X solid solution;

a second electrode layer laminated on the first electrode and including at least one element selected from the group consisting of Au, Pt, Pd, Ni, Ru, Rh, Re, C, Cu and Ir; and

a third electrode layer laminated on the second electrode layer and including at least one element selected from the group consisting of Al, Ag and Rh.

Claim 3. (Previously Presented) The thin film electrode according to claim 2, wherein the third electrode layer laminated on the second electrode layer includes at least one element selected from the group consisting of transparent conductive

oxides and transparent conductive nitrides.

Claim 4. (Original) The thin film electrode according to claim 3, further comprising a fourth electrode layer laminated on the third electrode layer and including at least one element selected from the group consisting of Al, Ag and Rh.

Claim 5. (Previously Presented) A thin film electrode for forming an ohmic contact in light emitting diodes or laser diodes, comprising: a first electrode layer laminated on a p-type gallium nitride layer and including at least one element selected from the group consisting of Au, Pt, Pd, Ni, Ru, Rh, Re, C, Cu and Ir; and a second electrode layer laminated on the first electrode and including a Ni--X solid solution, wherein the Ni-based (Ni--X) solid solution includes nickel (Ni) as a matrix metal, and X including at least one element selected from the group consisting of group II elements, group VI elements, Sc, Y, Ge, Sn and Sb.

Claim 6. (Currently Amended) A thin film electrode ~~according to claim 5, further~~ for forming an ohmic contact in light emitting diodes or laser diodes, comprising

a first electrode layer laminated on a p-type gallium nitride layer and including at least one element selected from the group consisting of Au, Pt, Pd, Ni, Ru, Rh, Re, C, Cu and Ir;

a second electrode layer laminated on the first electrode and including a Ni--X solid solution; and

a third electrode layer laminated on the second electrode layer and

comprising at least one element selected from the group consisting of Al, Ag and Rh.

Claim 7. (Currently Amended) The thin film electrode according to claim [[5]] 6, wherein the third electrode layer laminated on the second electrode layer comprises at least one compound selected from the group consisting of transparent conductive oxides and transparent conductive nitrides, and further comprising a fourth electrode layer laminated on the third electrode layer and comprising at least one element selected from the group consisting of Al, Ag and Rh.

Claim 8. (Previously Presented) A thin film electrode for forming an ohmic contact in light emitting diodes or laser diodes, comprising: a first electrode layer laminated on a p-type gallium nitride layer and including a Ni--X solid solution; and a second electrode layer laminated on the first electrode and including at least one transparent conductive nitride.

Claim 9. (Original) The thin film electrode according to claim 8, further comprising a third electrode layer laminated on the second electrode layer and including at least one element selected from the group consisting of Al, Ag and Rh.

Claim 10. (Currently Amended) A thin film electrode for forming an ohmic contact in light emitting diodes or laser diodes, comprising: a first electrode layer laminated on a p-type gallium nitride layer and including a Ni--X solid solution; and a second electrode layer laminated on the first electrode layer and including at least one element selected from the group consisting of Al, Ag and Rh, wherein the Ni-

based (Ni--X) solid solution includes nickel (Ni) as a matrix metal, and X including at least one element selected from the group consisting of group II elements, group VI elements, Sc, Y, Ge, Sn and Sb.

Claim 11. (Canceled)

Claim 12. (Previosuly Presented) The thin film electrode according to claim 10, wherein the group II elements include one element selected from the group consisting of Mg, Be, Ca and Zn.

Claim 13. (Previosuly Presented) The thin film electrode according to claim 10, wherein the group VI elements include one element selected from the group consisting of S, Se and Te.

Claim 14. (Previosuly Presented) The thin film electrode according to claim 10, wherein the X element constituting the Ni-based (Ni--X) solid solution is added in the amount of 1 ~ 49 atomic percent (%).

Claim 15. (Currently Amended) The thin film electrode according to claim 7, wherein the electrode layers formed from the Ni-based solid solution have a thickness of 1 ~1,000 Å, and the first, the second, the third, and the fourth electrode layers have an overall thickness of 1 ~~10,000~~ 50,000 Å.

Claim 16. (Original) The thin film electrode according to claim 1, wherein the p-type gallium nitride has a composition of $Al_xIn_yGa_zN$ (where $0<x<1$, $0<y<1$, $0<z<1$, and $x+y+z=1$).

Claim 17. (Canceled)